Save Lake Superior Association - Summer 2016

Dedicated to the restoration and preservation of this Great Lake

www.savelakesuperior.org

POLITICS TRUMPS TECHNOLOGY CONCERNING LAKE SUPERIOR WATER QUALITY

Conversation about the environment is growing less popular as time passes especially during this political season. Science and education have progressed to the point where there is little excuse for ignoring the sources and effects of toxic substances in our air and water. Corporations have perfected the process euphemistically called "Social license to mine (and otherwise pollute)". Debits from pollution are not included in corporate financial planning balance sheets. Only credits appear on the ledger and in the media and political jargon. Historically, Reserve Mining Company in Silver Bay, Minnesota leveraged money and politics to obtain permits to dump 67,000 tons of taconite processing waste tailings into Lake Superior every day in the late 1950s through the mid-1970s. The company battled for this "right" all the way to federal court where Judge Miles Lord ruled against that "right". It took more than 7 years to move the waste stream "on-land" where it is still either leaking or discharging millions of gallons of water polluted with asbestos-like fibers and sulfates into the lake each day. One-by-one each pollution regulation is being weakened or removed by the Minnesota Pollution Control Agency through political pressure.

Also, we have the 1400 military ordinance waste barrels remaining in the lake, some near the Duluth city water station inlet. Asbestos fibers are still being filtered out of the inlet water. Domestic and foreign freighters continue to dump billions of gallons of infected ballast water into the Duluth, Two Harbors and Silver Bay harbors each shipping season. Officials proudly announce that no new species have been detected in the lake in the past 6 years. They are just replenishing the 100 species we already have! Shipping and mining companies claim that treating ballast water would drive them out of business and get away with it using political influence and media control.

The current political and media onslaught to introduce copper-nickel mining into the Lake Superior watershed is unprecedented in its expense and reach. The goal of PolyMet and other similar secondary corporations is to obtain permits for their global owners to mine and pollute with toxic elements from acid mine drainage.

Minnesota state pollution standards have been lowered to the point of being useless. Global corporations would be given the legal right to pollute our air and water and poison our children and other vulnerable citizens. Victims will eventually include all of us. Environmental threats are now "removed" by elections! Irreversible pollution is "managed" by using "trial and error" fish management techniques. Politics trumps technology.





SYNOPSIS OF HOW MINERAL LEASING LEADS TO WATER POLLUTION IN LAKE SUPERIOR

The granting of mineral leases in the Superior National Forest in NE MN eventually would lead to sulfide mining in both the Boundary Waters and the Lake Superior Watershed. That's how things work. Sulfide mining leads to especially harmful water pollution called acid mine drainage. It always has. This pollution leads to destruction of natural resources certain harm to public health. Twin Metals plans to deposit hazardous sulfide ore waste in the Lake Superior watershed to protect the Boundary Waters. But, permitting PolyMet would provide a processing facility for Twin Metals production. So we must STOP POLYMET before we can SAVE THE BOUNDARY WATERS. The accompanying USFS land transfer at the site of the proposed PolyMet NorthMet Mine should not be approved for the same reason. It would facilitate acid mine drainage into the Lake Superior watershed and Lake Superior. SAVE LAKE SUPERIOR AND ITS WATERSHED TO PROTECT THE BOUNDARY WATERS.

Twin Metals Lease Input, Superior National Forest, 8901 Grand Ave. Place, Duluth, MN 55808

TWIN METALS MINERAL LEASE PUBLIC INPUT SESSION COMMENTS FROM SAVE LAKE SUPERIOR ASSOCIATION

- 1. The mission of Save Lake Superior Association is to "Prevent Further Degradation of Lake Superior and to promote its rehabilitation.
- 2. We were founded in response to the pollution of Lake Superior caused by the direct discharge of taconite tailings into the lake by Reserve Mining Company at Silver Bay Minnesota.
- 3. The lake is cleaner today because of the actions taken by those citizens.
- 4. We view the current threat of toxins entering the lake and its watershed from copper-sulfide mining projects such as PolyMet NorthMet and Twin Metals equally and perhaps more significant than that from the taconite tailings laced with asbestos-like fibers and other pollutants.
- 5. We are opposed to the renewal of the Twin Metals mineral leases for Northeastern Minnesota. These leases would inevitably lead to the destruction of Superior National Forest Lands, the direct pollution of the Boundary Waters and the purposeful associated pollution of Lake Superior and its watershed.
- 6. Twin Metals management boldly proclaim that toxic waste material would be stored in the Lake Superior watershed either at PolyMet if it were permitted or at a separate tailings pond very near the Laurentian Divide on the Lake Superior drainage side. Millions of tons of acid, sulfates and toxic metals would leach into ground and surface water. The harmful effects on thousands of "downstream" citizens are either discounted or ignored. These are technically verifiable facts and present at every sulfide mine worldwide. We have asked for a moratorium on granting any permits to mine and process this type of material but our requests have also been ignored. This is a serious public health issue.
- 7. Permitting of the PolyMet NorthMet Project would enhance the value of the Twin Metals leases. Use of the excess processing capacity available at the proposed PolyMet production facility would reduce costs of Twin Metals and similar projects and also increase profitability of the PolyMet operation all at the expense of the environment. The huge combined amounts of acid mine drainage would seriously harm both watersheds and poison Lake Superior.
- 8. This is no time for the dependence upon "trial and error mitigation schemes" in the management of valuable resources such as the Superior National Forest, The Boundary Waters and Lake Superior. Pollution from acid mine drainage is irreversible and perpetual according to PolyMet's own Final Environmental Impact Statement. We strongly oppose both the renewal of the Twin Metals Leases and the land transfer for the PolyMet Mine and processing facility which would also destroy valuable Superior National Forest land. Wetlands and forests are invaluable in flood prevention and natural habitat preservation.

Thank you for the opportunity to comment.

LeRoger Lind President, Save Lake Superior Association

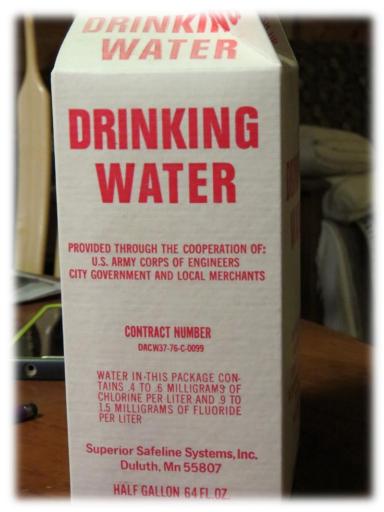
"Lake Superior Barrel Concerns" Yes They Are Still There!

Dan Rau reviews the current efforts of SLSA and associates in identifying the potential sources of toxins in the thousand or more barrels lying on the bottom of the Western end of Lake Superior after being transported from the Twin Cities Ammunition Plant and dumped into the lake. For more general information Google "Lake Superior Barrels".

This is a summary of the information I regarding new information about the quantity and variety of toxic materials handled at the Twin Cities Army Ammunition Plant that may have been included in the approximately 1,400 barrels dumped into Lake Superior in the vicinity of the Duluth municipal water intake.

My immediate objective is to have the city of Duluth ask EPA to use their hydrographic survey vessel in Duluth to search the area closest to the Duluth municipal water intake that has not been searched for barrels, in case there are barrels closer to the water intake than previous surveys detected, and to have the Corps of Engineers recover any barrels found there for public examination. None of the previous barrel surveys have searched the area inside of 90 feet of water, and the Duluth water intake is in 65 feet of water.

Depleted uranium and several other radionuclides are probably the toxins of most concern that may be in the barrels. A US Army report "INSTALLATION ASSESSMENT OF TWIN CITIES ARMY AMMUNITION PLANT, REPORT NO. 129 OCTOBER 1978" (Army 78) established that in 1978 Honeywell, Inc was working with depleted uranium in the building where the Lake Superior barrels originated,



and that several other radionuclides were in use at TCAAP, and that there were radioactive contamination problems in several locations at TCAAP.

ftp://ftp.co.ramsey.mn.us/RFP/Disc%202/Site%20I/21130--Site%20I-May%201990.pdf

A report prepared for Honeywell by International Technology Corporation (ITC 1990, see appendix for full citation) documents the discovery in 1986 of depleted uranium and eleven other radionuclides in the sanitary sewers of Building 502 and the recovery of 1,053 fifty-five gallon barrels (262 cubic yards, or approximately 250 tons) of contaminated sludge from those sewers.

Army 78 describes the flushing of sewer sludge from TCAAP's sewer system into the Twin Cities metropolitan sewer system for at least 12 years, and documents several other highly toxic substances disposed on the grounds of TCAAP, including mercurous nitrate and cyanide. None of these toxins is mentioned in MPCA's list of remediated contaminants of concern at the TCAAP Superfund site, even though the MPCA library in St Paul sent me a copy of Army 78, and ITC 1990 is available online on a Ramsey County website.

Building 502 at TCAAP is identified as the source of the Lake Superior barrels in a report prepared by the US ARMY MATERIEL READINESS COMMAND after the first (failed) attempt to recover some of the barrels "FINAL REPORT ON CLASSIFIED SCRAP IN LAKE SUPERIOR 8 July 1977" (Army 77).

The quantities of depleted uranium handled and volatile organic chemical contaminants (vocs) are not documented by MPCA for the TCAAP Superfund site, but the immense quantities of vocs recovered at the

superfund site and the tons of depleted uranium ammunition fired at two army test ranges give an idea of the magnitude of voc contamination and an idea of the amount of depleted uranium handled.

MPCA's website reports that More than 200,000 pounds of chlorinated solvents have been removed from the deep soils, approximately 1,500 cubic yards of PCB-contaminated soil have been incinerated. Approximately 226,000 pounds of chlorinated solvents have been removed from the groundwater. Approximately 1.2 billion

gallons of groundwater are treated each year. Groundwater treatment is expected to continue until approximately 2040. A June 20, 2016 Minneapolis Star Tribune article reports the discovery of a new toxin from TCAAP, 1,4 dioxane, in the drinking water supplies of the neighboring communities of New Brighton and St Anthony that will require additional tens of millions of dollars spent on new treatment plants for the communities.

For information on depleted uranium (DU) ammunition manufacturing at TCAAP, I searched the Nuclear Regulatory Commission's (NRC) very poorly organized websites. NRC licenses the use of radioactive

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materials, and was created from the former Atomic Energy Commission in 1974. No information was found in my searches of NRC sites for DU manufacturing at TCAAP, but these two testing ground reports specify the quantities of DU ammunition tested there, without specifying where the ammunition was manufactured. The two Army testing grounds are Aberdeen Proving Ground (APG) in Maryland, and Jefferson Proving Ground (JPG) in southeastern Indiana. These citations record a total of 230 metric tons (250 US short tons) of depleted uranium ammunition fired into the environment at these two proving grounds.

The Army began using licensed [radioactive] material at APG in the late 1950s. A total of 130,000 kilograms [130 metric tons or 143 US tons] of DU have been fired in the outdoor target ranges.... The facility is currently in use, and the Army plans to use it for munitions testing for the foreseeable future. Therefore, there is currently no plan to remediate the contaminated area to unrestricted release criteria.

http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1997/secy1997-068/1997-068scy.pdf

From 1984-1994, JPG test fired 100,000 kg [220,462 lbs.] of tank penetrator rounds containing depleted uranium (DU). ... After several operations to recover DU, the impact area still contains about 70,000 kg [154,324 lbs.] of DU and 1.5 million rounds of unexploded ordinance (UXO).

http://www.nrc.gov/infofinder/decommissioning/complex/jeffersonproving-ground-facility.html

Membership Dues

Please check your Newsletter mailing label for expiration date. If the year is not current, it needs to be updated. Repeat of new dues structure:

ALL EXCEPT LIFETIME ARE PER PERSON PER YEAR.

\$10 Fixed income \$50 Sustaining \$200 Lifetime \$20 General \$100 Benefactor (per person) \$30 Family

The Lifetime option is only available to new members or members whose label is currently up-to-date.

Please designate your choice when you renew.

We appreciate your interest as well as your support.

Dan Rau, Vice President, Save Lake Superior Association.